



Applications

- distance training
- remote medical consultation for emergency cases
- consultation during surgical operations
- virtual congress
- distribution of content acquired in medical contexts
- direct access to specialist knowledge of doctors located all over the world
- promotion for centres of excellence
- remote video consultation

VIRTUS: Remote Video Consultation for Healthcare



VIRTUS is the ideal solution for medical assistance, consultation and emergencies as well as medical training. This complete system for remote video consultation enables real-time audio/video communication and simultaneous distribution of content acquired in a medical context, especially from biomedical devices. VIRTUS is the perfect tool for distance training and real-time expert consultation during important stages of treatment, such as surgery..

VIRTUS: a state-of-the-art device

VIRTUS has a series of unique innovative features:

- real-time transmission of high-definition images over telematic medical networks;
- the same content can be received by several authenticated subscribers at the same time;
- the integrated audio conference system enables between system operators and users;
- can be combined with satellite broadband distribution systems;
- based on highly efficient audio/video encoding technologies (MPEG 4, H.264) for optimal use of network resources;
- based on open source technologies, can be combined with Voice over IP communication (VoIP);
- can be used with bluetooth devices to allow experts to continue to work freely during consultation.

Features

Emergency management

VIRTUS enables fast expert consultation during all types of emergency. This is a critical feature in terms of lives saved. The system can be easily integrated with regional, national or international service centres to extend its field of application.

Efficiency

VIRTUS uses high-efficiency encoding algorithms (MPEG4, H.264) and multicast technologies to send the content to a high number of users with one single transmission.

High quality

Encoding parameters can be set dynamically and independently of each other, thus obtaining, on a case-by-case basis, the best possible audio/video quality and reducing bandwidth usage to a minimum.

Low latency

Both encoding and decoding latency times are dramatically reduced and higher audio/video quality is provided as compared to systems based on other protocols.

Minimum costs

The easy yet complete and flexible parameter configuration allows optimal use of network resources, thus providing a cost-effective, complete system.

Integratability

The system can be combined with wireless broadband networks (Wi-Fi, satellite, etc.) to cover wide areas and overcome geographical restrictions.

High usability

The intuitive web-based interface can be easily and quickly configured and used both by specialist doctors and medical or paramedical staff.

Ease of use

The transmitting encoder has been specifically designed for ease of use. Doctors and medical staff requiring consultation only need to turn on the device to start the video stream and join the audio conference.

Technical specification

Input

DV digital video
DVB-S
DVB-T
TV receiver
analogue video

Video encoding

MPEG4 and H.264

Accesses devices

PC, TV decoder and palmtops

Phone interface

SIP protocol for connections
with chat and phone systems

Latency

approximately 1 sec.

Video resolution

544 x 576

Bit rate

2Mbps